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SCHOOL AND SOCIETY

EDITED BY J. McKEEN CATTELL

Volume VI SATURDAY, NOVEMBER 3, 1917 Number 149

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SCHOOL AND SOCIETY

Volume VI SATURDAY, NOVEMBER, 3, 1917 Number 149

THE POSITION OF LUTHER UPON EDUCATION

THIS year nineteen seventeen will mark the four hundredth anniversary of the day when the famous Theses were nailed upon the door of the Castle Church at Wittenberg by an Augustinian monk. The commotion aroused thereby was wholly misunderstood at first both by the highest dignitaries of the church and by her most caustic opponents. It seems as if Luther himself thought that he had proposed an ordinary medieval disputation, a commonplace academic event of the learned but stupid world of monks and pedagogues. But it was not so. This was an event for which the larger world had been long preparing, an event that at once obliterated all academic and medieval boundaries. It became a universal and modern discussion with its daring appeal to that common, human reason which Luther at first eulogized and then bitterly condemned. The problem developed into a program; the faltering declaration became a watchword and a battle cry.

In this anniversary year, educators as well as churchmen may well study again the attitude of Martin Luther, a great educational as well as religious prophet. His theory was the theory of his followers; he laid foundations upon which we are even now building. It is correct to say that the Protestant arguments for education were most aggressively stated by the greatest of the reformers. This he did in two tracts, written, as most of Luther's tracts were written, for practical purposes. The documents are called, respectively, "A Letter to the mayors and aldermen of all the cities of Germany in behalf of Christian schools" and "A Sermon on the duty of sending children to school." The "Letter" was written in 1524 on the eve of the Peasant's Revolt and in the midst of the confusion which led to that outbreak; and the "Sermon" in 1530 just after the Saxon church visitation. All men are the products of their times and Luther perhaps more than most other great leaders. Accordingly, a study of the situation discloses, pretty clearly, the reasons for his educational positions.

The Reformation was the culmination of several distinct tendencies. And the movement was at different times and for different reasons supported by widely separated sections of the people. Although Luther was no humanist, the humanists supported him because they welcomed every opportunity to deal a blow at medievalism and at the superstition and obscurantism which the medievalists fostered and defended. If Erasmus can not be regarded as a supporter of Luther yet had he labored valiantly to prepare the way for him. Revolutions do make for odd alliances and some surprising bonds were forged in the first fires of Reformation. For a time, even Ulrich von Hutten, brilliant but violent, irreligious and corrupt, was numbered with the prophets. Before long, however, the more radical humanists deserted the cause, for they saw that they were merely exchanging one church and one system of dogma for another hardly more palatable to them.

Another group which hoped to bene-

fit from the upheaval were the social reformers. There was in sixteenth-century Germany a great deal of social unrest which expressed itself in various ways, but particularly in the periodic revivals of a secret organization called the *Bundschuh*. The social reformers among the oppressed and restless peasants regarded Luther as one of themselves, and the Lutheran movement as a means of progress in the direction of democracy and social justice. They also were undeceived. Luther, indeed, was a peasant by birth. He had denounced the greed of the landlords and approved the substance of the "Twelve Articles" which became the "charter" of the Peasant Revolt. But in spite of this, when the storm burst, he took the side of the princes and the effective powers. Without raising any ethical questions, we will simply notice the effect which this choice had upon the Reformation and upon Luther; namely, that as a result of the insurrection, Luther acquired a deep and lasting distrust of the common people, which made him frustrate "every effort to give anything like a democratic ecclesiastical organization to the Evangelical Church and which led him to bind his Reformation in the chains of secular control to the extent of regarding the secular authority as possessing a quasi-episcopal function."

In the third place, many of the German princes supported the Reformation, and this for various reasons. They did not want to have their states drained of funds to support a foreign court and adorn a distant cathedral. They were jealous for the growing spirit of nationality in their dominions and did not want to see it curbed by the ecclesiastical power. It is evident that the protection of the princes was essential to the success of Luther's cause. Otherwise he would have been crushed. A strong civil power, well-informed and well disposed toward the new church, became one of his ideals. The secular government which "maintains temporal and transitory peace, law and life," also, as well as the church, exists by divine blessing. This conviction strongly influenced his educational theory.

It is also hard to see how the Reformation could have been accomplished without the aid of the printing press. It was supported by the state, modified by university teaching and by the pulpit, but carried through and made effective by printer's ink. Printing had been in use for three decades when Luther was born; and about three decades after his birth when he printed his first book it was still a new and unfamiliar process. But now it did not long remain so. "Now the printers will have their hands full," wrote Hutten when the report came to him of Luther's protest against the sale of indulgences. And so the event proved. Luther's "Address to the Nobles of Germany," printed in August, 1520, sold five thousand copies in five days. The "Index Expurgatorius" simply whetted the public appetite for the proscribed books. And ere long Europe was full of the "winged words."

The wide circulation of Reformation literature and its immediate influence upon opinion and belief evidence that an elementary education was fairly common in the early sixteenth century and that it is only too easy for Protestant historians to overstate the lack of educational facilities provided before the Reformation. It has been generally supposed in some Protestant circles that the Reformation produced immediate and radical improvement in the educational condition of northern Europe. But historians have definitely shown that there was no such *saltum* in either institutions and curriculum or in educational practise. True, the leaders of the Reformation, Melanchthon, Bugenhagen and others, founded many new schools; but

these were intended, in large part, to replace educational institutions that had been destroyed by the Reformation itself. Similar statements hold in regard to the curricula and the methods of instruction. Just as, theoretically, the Reformation demanded liberty of conscience, while actually, intolerance, bigotry and political domination of speech and opinion were the rule, so in education the same formal and narrow interests prevailed. Only in educational theory was there any marked advance.

We have a great deal of evidence showing that the immediate influence of the Reformation upon education was even harmful. Erasmus said: "Where Lutherism rules, there letters die." And of Luther's attitude toward the classics he said: "He loads the classical studies with hatred and contempt which is fatal to us and not helpful to him." This was, perhaps, not quite fair; and yet Luther, undoubtedly, looked upon the classical languages chiefly as a theological weapon.

In the parts of Germany where the Reformation was accepted much confusion was caused by the transfer from the Catholic to the Protestant beliefs, modes of worship and methods of church government; and in consequence education ceased to flourish. Endowments were confiscated. Scholarships and bursaries became defunct. The monastic, cathedral and parish schools and other institutions for teaching which the old church had provided fell into decay. The monk deserted his monastery and the nun her convent. Where there was no longer any priestly office it needed no schools to train to priestly functions. The support of education and the demand for education disappeared together. Luther himself, with indignation in his phrases, testified to this decay. "We see how schools are deteriorating throughout Germany," he said. "The universities are becoming weak, the monasteries are declining. . . . And because selfish parents see that they can no longer place their children upon the bounty of monasteries and cathedrals they refuse to educate them."

The general religious and social conditions of large portions of Germany at that time were deplorable. Among the shepherds of the flock there were many who had been priests and monks under the old order. In spite of this—and in some cases because of it—there was much ignorance and immorality among the clergy; ignorance of the words of the Decalog and of the Lord's Prayer, and immorality such as came within the purview of the criminal code. Melanchthon, visiting the churches in Thuringia in 1527, asked one pastor, a former monk, "Do you teach the Ten Commandments?" And to his astonishment he received the reply: "I haven't the book." Luther, after completing a similar visitation in Saxony the following year, wrote in the preface to his "Smaller Catechism": "Eternal God, what distress did I behold! The people, especially those who live in villages, and even curates, for the most part, possess so little knowledge of Christian doctrine that I even blush to tell it."

But it was difficult to secure even poor ministers, ignorant ministers, such as these. Luther lamented the dearth of preachers and teachers and made a computation to show that Saxony was at that time only half supplied with pastors and that conditions were becoming worse because of the neglect of education. He says:

> I should like to know where in three years we are to get pastors, teachers and sextons. . . . It is sad to see how the universities of Erfurt, Leipsic and others, as well as the preparatory schools are deserted, so that Wittenberg, almost alone, is doing its best.

The efforts of the Catholic church had been directed chiefly to religious education. Catholicism had allowed and authorized rather than fostered and encouraged, edu-

cation for secular purposes. Luther urged the necessity of education for the civil leadership of the country also. He was in this particular no narrow churchman. And this is one of the singular excellences of his educational theory, due, however, the present reviewer thinks, to the close dependence of his church upon the state for protection. Luther says:

> The question is how we are to get able and skilful rulers. And in this matter we are put to shame by the heathen, who in ancient times, especially the Greeks and Romans, without knowing that civil government is a divine ordinance, yet instructed the boys and girls with such earnestness and industry that when I think of it I am ashamed of Christians. . . . Even if there were no soul and men did not need schools and the languages for the sake of Christianity and the Scriptures, still for the establishment of the best schools everywhere, both for boys and girls, this consideration is of itself sufficient, namely, that society, for the maintenance of civil order and the proper regulation of the household, needs accomplished men and women.

So Luther asserted that education was a necessity for leadership in the church, and in the state, and for the proper conduct of family life.

A worthy family life was, according to Luther, both an end of education and a means thereto. Education was to be in the family and for the family. The German people have greatly profited by this high value placed upon family life by their first great modern leader. That education was to be for girls as well as for boys was in itself a remarkable advance. In a word, education was to be universal. The shift of emphasis from an infallible church to an infallible book made it necessary that each individual should be able to read and interpret that book. These, then, were the chief aims of education—the forming of the individual conscience; the purifying of family life; the preparation of a trained leadership for church and state.

Luther was not willing to rely upon private initiative for the accomplishment of these ends. He had before him too many examples of educational apathy for that: parents neglecting the duty of teaching their children because of ignorance, lack of piety and want of time and money. To be sure, the rich were urged to make bequests for the maintenance of schools. And the children of poor parents were to be aided with the property of the church, as had been the custom under the old régime. But the need for wider education was so general and urgent and the funds available so inadequate that no *laissez-faire* policy could be tolerated by an energetic leader like Luther. And all these considerations acquired added force from the fact that the state, like the good angel of the Evangelical church, stood ready with plenitude of power to do whatever seemed necessary. And it is in Luther's plea that the state should support education that we see best that dependence upon the civil arm which we have been noticing.

The state was to be active, educationally, in three ways. It was to select the "promising lads" for future leadership. "Whenever the government sees a promising lad let him be sent to school," said Luther. The government and the church had need of such lads. That was sufficient. Secondly, the state could require the people to support schools. In a letter written in 1526 to the Elector John, Luther said:

> Where there are towns and villages which have the ability, your electoral grace has the power to compel them to maintain schools, pulpits and parishes.

People ought to be compelled to pay for schools just as they would for roads and bridges and other public utilities. And, thirdly, the state's heavy hand was to be laid not only upon the purses, but also upon the children and parents themselves. The means and institutions being provided, if

the people still did not take advantage of their opportunities, then, said Luther:

> I maintain that the civil authorities are under obligation to compel the people to send their children to school, especially such as are promising. . . . For our rulers are certainly bound to maintain the spiritual and secular offices and callings so that there may always be preachers, jurists, pastors, scribes, physicians, schoolmasters and the like; for these can not be dispensed with. If the government can compel such citizens as are fit for military service to bear spear and rifle, to mount ramparts and perform other martial duties in time of war, how much more has it a right to compel the people to send their children to school, because in this case we are warring with the devil.

All children were to be sent to school, but if the parents were poor an hour or two a day would be sufficient. The rest of the time they were to be allowed to work. It was Luther who first clearly perceived that the principles of the Reformation logically demanded a universal elementary education; and he first called upon the state to support the Reformation and to assure its ultimate success by controlling public opinion through the educational administration. We will now turn to a discussion of method and of the curriculum.

As we shall see, the followers of Luther understood very fully his reasons for teaching the languages. It would have been highly desirable that they should have been similarly attentive to his method; for, on the method of teaching languages he has some advice with a modern sound. Indeed, so modern and so generally accepted today are his ideas that we are apt to underestimate the originality of his program. But to avoid that danger we need only recall the methods then in use. There were, to specify, the emphasis upon the study of grammar and upon the use of the mechanical memory. With these usually goes—and it was so then—either a strong appeal to emulation or a stronger appeal to physical stimuli. Luther, on the contrary, urged the importance of practise and of oral methods and, correlatively, the necessity for content instead of mere form. He saw that in order to learn to use a language one must use it; that as one learns to walk by walking, so one learns to speak by speaking; and, that one should use language not for the purpose of speaking, but for the purpose of saying something. A knowledge of grammar would not be an end in itself according to this theory, as it was in many post-Reformation schools and among them in our own well-named colonial grammar schools.

There are several striking passages in Luther which should be quoted in this connection. He says:

> Every one learns German and other languages much more from speaking at home, at market, in church, than from books. Printed words are dead; spoken words are living. On the printed page they are not as forcible as when uttered by the soul of man. Tell me, where has there ever been a language that one could learn to speak properly from the grammar alone? Is it not true that even the languages which have the most clearly defined rules, as the Latin and Greek, can be better learned from practise and from habit than from rules? . . . Knowledge is of two kinds—one of words and the other of things. Whoever has no knowledge of things will not be helped by a knowledge of words. . . . I do not wish to be understood as rejecting grammar which is necessary; but this I say that if the subject is not studied along with the grammar one will never become a good teacher.

These realistic positions are all closely related to the doctrine that learning is not a passive external matter, but an active development, a growing of the life within. When teachers realize this fully they cease to dominate the thinking of their students and become in reality educators, literally drawing out in the student his better self. It ought to follow that with good teaching will go rational discipline. And this is historically true. The history of education affords little opportunity for broad and sweeping generalization, but so far as ap-

pears, there have been few schools or school-systems in which formal methods, the mechanical use of the memory, the demand for facts divorced from principles have not been accompanied by harsh corporal punishment or by the immoral use of emulation and competition. And this statement applies nowhere with greater force than to the Germany of Luther's day. But Luther urged that children be given opportunity for play and that studies should both interest the student and inform him about the world in which he lives. The schools were no longer to be "a hell or a purgatory in which children were tortured over cases and tenses and in which with much flogging, trembling, anguish and wretchedness they learned nothing."

While Luther emphasized religious instruction, his suggestions for a curriculum show that he desired no narrow ecclesiastical course of study, no mere reading, writing and Bible school. In fact, the subjects he named had never been included in the usual school course. History, poetry, music, mathematics, the study of nature, the learned languages, Latin, Greek and Hebrew, with the emphasis upon Latin, are the subjects he proposed. These were to be preceded by a knowledge of the mother tongue and the catechism and on the part of the "promising lads" to be followed by university studies. He grew eloquent in praise of history and poetry and music, both vocal and instrumental. But the most surprising inclusion is "the study of nature." And the following passage, typically realistic in its attitude, shows his interest in nature. He says: "We are at the dawn of a new era, for we are beginning to recover the knowledge of the external world. . . . We now observe creatures properly and not as formerly under the Papacy. Erasmus is indifferent and does not care to know how fruit is developed from the germ. But by the grace of God we already recognize in the most delicate flower the wonders of divine goodness and omnipotence." He does not say that we ought to study nature in order to acquire a mastery of natural forces; or in other words, the passage foreshadows rather Comenius than Bacon.

Mathew Arnold has pointed out that, at the North, the Renaissance and the Reformation were very closely allied and, indeed, that the reformers of the first rank were all eminent humanists with "the great but single exception" of Luther himself. Therefore, we will not expect from him any argument for the study of the classical languages and literatures as aids to a criticism of life and to the diffusion of sweetness and light. Luther does say that the languages are an ornament to their possessor; that they are "a wonderful gift of God"; that they are of great practical benefit to the merchant, the lawyer, the statesman and the theologian. But the great and sufficient reason for their study is that the languages, "the holy languages," are the vehicle of the Gospel, "the scabbard" in which the sword of the Spirit is sheathed. So Luther argued. "For," he says, "when God wished to shed His Spirit through the Gospel throughout the world, He gave the languages for that purpose. And by means of the Roman Empire, He made Latin and Greek the languages of many lands, that His Gospel might speedily bear fruit far and wide. He has done the same now. For a time no one understood why God had revived the study of the languages. But now we see that it was for the sake of the Gospel, which He wished to bring to light and thereby to expose and destroy the reign of Anti-Christ. For the same reason He gave Greece a prey to the Turks in order that Greek scholars, driven from home and scattered abroad, might bear the Greek tongue to other countries, and thereby stimulate the study of the lan-

guages." So Luther read history. And for these reasons he regarded it as the evident duty of Christians "earnestly to cultivate the languages, now that God has restored them to the world through the revival of learning."

Evidently we have in Martin Luther a man who partly from choice and partly from force of circumstances took very advanced ground on educational theory and practise. Centuries of progress were required for the world to advance to his positions. This may be illustrated as suggested in the preceding discussion by his attitude on state activity in education, by his realism and by his argument for the study of the languages.

He urged that the state should compel the attendance of children at school. But compulsory attendance developed very slowly in Germany for several centuries after Luther and still more slowly elsewhere. The first compulsory attendance law that was in any wise effective was that passed for Weimar in 1619. In 1642 a similar law was passed for Gotha, and not until 1773 for Saxony. But, as early as 1713, King Frederick William saw with dissatisfaction that "parents especially in the country prove negligent in sending their children to school, in consequence of which the poor youth are kept in gross ignorance as concerns reading, writing and ciphering, as well as that which concerns the weal and salvation of their souls." As a result of this conviction the first compulsory attendance law in Prussia was passed in 1717. However, these early laws were mild in statement and but laxly enforced. Not until 1888 were all fees abolished in the elementary schools of Germany; and in 1890 the school laws of the empire were codified. Since then evasion of the compulsory attendance provisions has been almost if not quite impossible. To Luther we can ascribe only the bare suggestion of this development; but he did make that suggestion.

But if it required centuries for the world to come up to the conception of Luther in this matter of state activity, once that point was reached the world soon went beyond him. State support and control of education as they appeared to his mind were very different from the present reality. He could have formed no idea of the present omnipotence of the state; nor of the present impotence of the church in secular matters. Although he speaks of public schools, he did not mean to imply secularization by that term. To him secular schools would have been an abomination. He did not realize that in pleading for state support he was invoking state control; that those who provide for the maintenance of any work eventually come to determine the methods and objects of that work.

The second suggested instance of his prophetic faculty is that which may justly be called his realism. Realism is involved in his plea for a broader curriculum; for the study of things rather than words and including the study of external nature; for the use of practise and oral methods; for the appeal to the pupil's interest; and for a milder discipline. These matters are now definitely incorporated into school practise, but the world had to wait a long time, after Luther spoke, for them. Most of them were reaffirmed by Comenius and again promptly forgotten until the eighteenth century gave them new and enduring life.

Thirdly, a comparison of the language of Luther with that of the most famous of our colonial school laws, that passed by the General Court of Massachusetts in 1647, shows how slow the progress of educational theory frequently is. The preamble of this familiar old law, in its quaint and attractive phraseology, reads as follows: "It being one chief project of that old deluder Satan,

to keep men from the knowledge of the Scriptures, as in former times, by keeping them in an unknown tongue, so in these latter times, by persuading from the use of tongues, that so at last the true sense and meaning of the original might be clouded by false glosses of saint-seeming deceivers, that learning might not be buried in the graves of our fathers in church and commonwealth, the Lord assisting our endeavors,—It is, therefore, ordered'' that certain schools for the teaching of languages be established. It is clear that this bit of educational philosophy is not native in Massachusetts. It was fathered by the Reformation and had served in Europe for just a century, since the death of the great reformer who formulated it; and it was carried thence in the *Mayflowers* and the *Welcomes* of the seventeenth century to America, where it served many years longer.

It seems that we may conclude:

1. That the Reformation helped to create the educational chaos which it later tried to reduce to order and that the appeal to the state was a natural stratagem to save an otherwise impossible situation.
2. That implicit in the cardinal educational doctrine of the Reformation lay the germ which developed into our universal, compulsory, secular school.
3. That Luther's realism was a natural correlate of universal education and the doctrine that the individual should develop his capacity to judge the realities of life for himself.
4. That even in his plea for the study of the biblical languages Luther prepared the argument which served the world for several centuries.

Harry G. Good

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SUPERVISED STUDY IN THE JUNIOR HIGH SCHOOL

Three reasons are advanced for the need of supervised study in the public schools. They are:

1. The many subjects now being taught in the public schools make it next to impossible for a child to get much help and direction in his studies at home.
2. Family life has become so varied that the child gets little or no opportunity to pursue his studies at home.
3. Individual differences in children are coming to be recognized.

Hall-Quest says:

> Supervised study is that plan of school procedure whereby each pupil is so adequately instructed and directed in the methods of studying and thinking that his daily preparation will progress under conditions most favorable to a hygienic, economical and self-reliant career of intellectual endeavor.

DIFFERENT PLANS OF SUPERVISED STUDY

The author quoted above outlines eight different plans of supervised study. A more comprehensive view of their working processes may be easily gleaned from Professor Hall-Quest's book on the subject, but it is only possible here to briefly outline the plans that a conclusion may be reached on their value to the junior high school. A list of the plans follows:

1. The general study hall,
2. Conferences,
3. The study coach,
4. Delayed-group plan,
5. Printed study directions,
6. Double period,
7. Weekly supervised study,
8. Divided period.

THE GENERAL STUDY HALL

The oldest form, the one most commonly practised, and possibly the weakest type of supervised study is that carried on in the general assembly hall of the high school. In this type the study period is in charge of

one person, the principal or a teacher, or, if the school is large, sometimes as many as three teachers are occupied in watching this hall at one time.

It is easily seen that this form of supervised study is superficial and in no way adequate to meet the demands. The large number of pupils under the teacher's control is a handicap to the teacher who is not prepared to assist and direct pupils in work outside of his or her own field.

CONFERENCES

There are two kinds of conference plans in use in our high schools. The stated conference is the commoner of the two. In this plan the teachers are required to remain for one period after the daily schedule is completed to confer with pupils who are in need of direction.

The other plan is conference by appointment. Weak pupils are asked to confer with the teacher. These conferences, it is argued, should be prompt, well-planned, definite, informal, and as short as good judgment permits. They are designed to aid weak pupils and assist in discipline and have no doubt been copied from the colleges.

THE STUDY COACH

Although not very widespread in its adoption, the study-coach plan is being used in several cities over the country. In some schools this position is filled by an unassigned teacher whose duty it is to guide groups of pupils over the more difficult places in their program of studies. But the "general" study coach has an office of his own, where individual pupils may go for advice and guidance. This position requires a peculiar type of teacher who is conversant with the various subjects of the curriculum, is sympathetic, conservative, and of excellent judgment.

DELAYED-GROUP PLAN

The delayed-group plan provides for the examination of records of pupils leaving the eighth grade for high school and the examination of their records after four weeks spent in the high school. The slow pupils are then segregated and given an amount of work equal to twelve weeks of the regular semester of eighteen weeks. In the summer these same pupils are put into a vacation school and, in six additional weeks of work, are usually able to be prepared for the regular second year of the high school.

PRINTED DIRECTIONS FOR STUDY

One principal has found it advantageous to print a pupil's study program and directions for study, placing a copy in the hands of each pupil. This principal says the plan has the following benefits: (1) improved discipline; (2) finer scholarship; (3) regular hours of home study; (4) systematic organization of pupil's time; (5) aid in starting to work; (6) balanced studying; (7) saving of time by knowing what to do next; (8) provision for needful leisure. The teacher must help by acting as a pilot for pupils.

Another principal has had a bulletin printed and put into the hands of the pupils. It contains general directions for study. The university high school of Chicago University also has this plan.

THE DOUBLE PERIOD

The double-period plan consists of a division of the schedule so that each pupil has two consecutive 40-minute periods for each subject taken. The first period is devoted to recitation and the second period to directed study. In the sciences requiring laboratory work the pupil spends two periods each day for four days in the laboratory and recites on the fifth day.

WEEKLY SUPERVISED STUDY

The weekly supervised study plan applies when one hour at the end of each week is devoted to the supervision of study by each teacher in that teacher's particular subject. This time is secured by cutting down the length of the periods equally on other days.

A variation of this plan is in use in one high school, where one hour a day is set aside for supervised study and guidance.

In Norfolk, Va., every other day is devoted to supervised study and it is claimed that this plan is effective.

THE DIVIDED PERIOD

The divided period, with slight variations, is employed at Batavia, N. Y., Newark, N. J., Columbia, Mo., and several other cities and towns. The Batavia plan provides for an associate teacher who guides the retarded pupils in a particular grade. The Newark plan divides the regular schedule period into two 25-minute periods, one part for study and one for recitation under the same teacher. The Columbia plan provides for more study than recitation and the class period is considered a laboratory hour in which pupils, seeking references, advice, etc., are allowed to come and go at will.

IN THE JUNIOR HIGH SCHOOL

One of the strong arguments for the establishment of the junior high school is the recognition of individual differences in children. These differences are to be considered from several standpoints: (1) native capacities; (2) sex differences; (3) image types; (4) dispositional attitudes. But, in considering these differences, group activities are not to be neglected.

The question arises: How, in the reorganization of the 8–4 plan of the public-school system, can we best care for individual and group differences? Shall it be by supervised study? If so, by which plan of supervised study?

Hall-Quest says that:

> The divided period seems to be the most easily adjusted and the most logical of all the methods of supervised study. A scheme which definitely and systematically teaches the pupils the mechanics of doing the next day's work must shortly become an integral part of every school in the United States.

While the writer does not wish to subscribe to such an inclusive statement, it is very evident that new junior high schools will include some form of supervised study. It is yet to be proved that it is possible to teach a child to study with any great degree of efficiency, because of the individual differences mentioned above. But if some form is to be adopted, which shall it be?

Professor E. E. Lewis, in his bulletin on the junior high school, expresses the belief that the divided-period plan will find the most support in new junior high schools. He says:

> Great care should be exercised in the junior high school in teaching students to study effectively. In general, the main features of the administrative policy should include divided periods, part for recitation and part for supervised study, and these should be arranged as regular parts of the daily program in most subjects. The administrative system should be of such a nature as to guarantee a minimum amount of time devoted by every pupil to each lesson each day in the presence of the particular instructor. Each teacher should be regarded as a director of study and should be carefully supervised by the principal.

NO GENERAL STUDY HALL

It has generally been conceded that the general study hall belies its name and is not a fit place to attempt to train children in well-ordered habits of study. Hence, it can safely be eliminated from a recognized junior high school; admitting that that same school may need and should be allowed

to have an auditorium where all students may gather for convocations or extra school activities.

CONFERENCES NOT EFFECTIVE

While stated conferences or conferences by appointment may be meritorious in colleges and universities (there are some strong arguments against them even there), it has not been clearly shown that they are in any great degree successful in the senior high school. Would they, then, be effective with pupils of younger years?

In the stated conference the pupils whom the teacher most needs to meet do not appear. The pupils who are actually attracted are those who would curry favor, those who find some personal charm in the teacher's personality, and those who expect to rely upon the teacher to pull them through a door they are too mentally lazy to enter.

The conference by appointment should, the writer believes, be labeled the "conference by *dis*appointment." It smacks too much of a disciplinary or retroactive measure. To the typical high-school student the school day is a long day and a hard one. He does not look upon the third-degree conference with anything but a third-degree attitude, the third degree below zero. Once in a great while a senior high-school student may be benefited by this method of evaluation, but to attempt to apply this method to the pupils of the junior high school would, as William James phrased it, be like "a blind man in a dark room hunting for a black cat which is not there."

THE STUDY-COACH PLAN

We have not developed in our public schools and colleges any individuals who are sufficiently proficient to be able to advise a high-school student upon each and every study in the curriculum. Hence, it seems that the adoption of the study-coach plan is somewhat premature. It may be that an administration has been able to procure a well-trained man or woman who is able to advise pupils in methods of study; but, if it is felt necessary to teach pupils these methods and if it is felt possible to do so, perhaps it would be better to supply the pupils with Sandwick's "How to Study" or Whipple's "How to Study Effectively." However, the arguments against this plan of study supervision are purely local.

DELAYED-GROUP PLAN

It will be seen at a glance that the delayed-group plan is simply another way of caring for retarded pupils and, although study supervision is claimed where it is being tried out, it is a question whether it should be included among the different plans of supervised study. Retarded pupils can better be taken care of in the junior high school under the divided-period plan, discussed later.

PRINTED DIRECTIONS FOR STUDY

Obviously the fallacy of the printed-directions-for-study plan in the junior high school would be its lack of appeal to the pupils. In all probability pupils of grades 7–8–9 would not read such instructions of their own accord, would not understand them fully, and would not follow them if they did understand them. Printed matter of that type, to use the vernacular, would not "get over."

THE DOUBLE PERIOD

On the face of it the double-period plan appears to be the solution of many problems arising in the intermediate school. For the individual child, when considered alone, it seems to be the ideal arrangement. Alternate periods of study and recitation would, other conditions being equal, assure thorough work and do away with the problem of home study. But with a small corps of teachers the double-period program is

next to impossible. In the large school, with a teaching staff of high number, wide differentiation in the course of study occurs and this is a stumbling block in making a curriculum for double periods. Either argument discourages the adoption of the double-period plan in the junior high school.

WEEKLY SUPERVISED STUDY

The weekly supervised-study period has its attractive qualities, but its success depends almost entirely on the manner of its administration. At its best it can but serve as a review period or an anticipatory period and as such would be of great value to a school. The rounding up of information and help which a pupil has received during the week would be highly beneficial, but any attempt at supervised study in the period thus spent would not prove noteworthy.

DIVIDED PERIOD PROBABLY BEST

Of the eight plans now in use in the United States, the divided period, it seems, has the best support. That plan has the following points in its favor:

1. Shortens the recitation period without damage. In the age of adolescence, brevity is the soul of the recitation period.
2. Provides for study of a subject immediately before or immediately after recitation on that subject. This has a strong psychological significance.
3. Does away with much of the problem of home study.
4. Does not interfere with the regular program of studies.
5. Allows for wider differentiation, in as much as it frees periods otherwise devoted to study.
6. Gives the pupil an opportunity for guidance from the teacher under whom he is pursuing the subject.
7. Gives the teacher an opportunity to learn the needs of the individual child and his difficulties in studying.
8. Brings closer cooperation between teacher and pupil.
9. Makes retardation less likely and promotion more likely.

Objection may be raised against this plan on the ground that it makes the recitation period too short. The pupil needs the development accompanying freedom of expression before the group, but the recitation period, as it has been conducted in our public schools, has been about as efficient an agency in the promotion of training as Rip van Winkle was in the promotion of manual labor. True, it may not give the teacher all the time she thinks she needs to cover all the points in the text-book, but recent studies have shown that the teacher occupies entirely too much time in the conduct of the recitation.

To make the divided period effective the teachers must understand what they are about; they must be made to see the program in detail and to realize the alleged possibilities in the supervision of study; they must learn the children and their limitations and this can probably best be done in supervising study and hearing recitations in the junior high school. But without well-selected teachers—teachers who are heart and soul in their work and who desire to make real men and women from the children they are trying to direct, supervised study in the junior high school or any other division of the school system will be as useless as a post-office pen.

H. C. HINES

IOWA STATE UNIVERSITY

EDUCATIONAL EVENTS

MILITARY TRAINING IN THE SCHOOLS OF FOREIGN COUNTRIES

A BULLETIN on military training in various nations, published by the Bureau of Educa-

tion, shows the widest variation in type of training for boys of school age. Great Britain, although she has resorted to conscription in the present war, has not had military training of boys of school age except in the nature of strictly voluntary work carried on by private agencies. Australia makes military training compulsory for all boys twelve to eighteen years of age, and New Zealand for boys over fourteen years. In Germany before the war the only military training for boys of school age was by voluntary organizations and was without arms. Decrees issued during the war have provided, however, for preparatory military training for all boys over sixteen years of age. The following is a brief statement of the practice in twenty of the nations of the world. Many of the statements have been obtained directly from the embassies or legations of the nations concerned:

BRITISH EMPIRE:

Great Britain.—Strictly voluntary work carried on by private agencies.

Australia.—Military instruction compulsory for all boys from twelve to eighteen years.

New Zealand.—Military instruction compulsory for boys over fourteen years.

Canada.—Military instruction carried on in voluntary cadet corps.

FRANCE:

Prescribed military instruction without arms, and rifle practise in elementary and higher elementary schools. Ages nine to thirteen years; rifle practise limited to boys over ten years of age. Specially trained instructors. Strong organizations carry on the work of military preparation among older boys.

GERMANY:

Voluntary organizations of older public-school pupils and students of secondary schools. Training *without arms.* Decrees issued during the war provide for preparatory military training of all boys over sixteen years of age.

AUSTRIA-HUNGARY:

Austria.—Voluntary organizations for military training of pupils of secondary schools, under government protectorate. Optional rifle practise in the last two years of secondary schools.

Hungary.—Voluntary organizations in elementary, secondary and higher schools. In many districts military instruction is obligatory in secondary schools.

SWITZERLAND:

Instruction in military gymnastics in elementary schools obligatory throughout the school age. Conducted by specially trained instructors. Voluntary rifle practise and military drill both with and without arms.

SWEDEN:

Compulsory rifle practise in public secondary schools for boys from fifteen to eighteen years of age. Given by special instructors.

NORWAY:

Voluntary rifle practise.

ITALY:

Military training given as obligatory subject in "national colleges." Private agencies provide for simple military drill for younger boys.

SPAIN:

No distinct military training is given. Some simple drill is included in the program of physical training.

PORTUGAL:

No military training is given in schools. The subject of "physical culture," which is taught generally, includes simple drill without arms. Boy Scout organizations are numerous.

RUSSIA:

Prescribed military gymnastics in elementary and secondary schools.

NETHERLANDS:

Military training given in voluntary organizations for boys over fifteen years of age.

GREECE:

Very intensive military instruction is given in gymnasia, under the patronage of the king. Simple drill obtains in all public schools in connection with physical training.

JAPAN:

Military gymnastics obligatory in elementary, secondary and normal schools.

MEXICO:

Obligatory military drill with arms in all primary and secondary schools. Regulated by state laws.

ARGENTINA:

Obligatory military training in the last two years of secondary schools. Specially trained instructors.

BOLIVIA:

Simple drill in connection with gymnastics.

PUBLIC HEALTH CHARTS FOR TEACHERS

EDUCATION in personal hygiene by means which respond in every way to the needs of this ideographic age is offered in the new series of health charts just issued from the

American Museum of Natural History, New York City, as originally prepared under the direction of Dr. C.-E. A. Winslow, curator of its department of public health.

These charts are especially adaptable for schools where it may not be possible or desirable to use educational films, and may be easily transported. The teachers of the public schools of the metropolis are so fortunate as to be able to obtain the loan of them without any expense.

The departments of public health and public education of the museum five years ago prepared three series of public health charts for the use of schools of New York City. Each consisted of a folio of wall charts illustrated from original photographs and devoted to the following subjects: "The Spread and Prevention of Communicable Disease." "Insects as Carriers of Disease," and "Bacteria and Their Work in the World."

The demand for these in the schools was many times greater than the supply, and doubtless many teachers were discouraged in their efforts to obtain them. As a step toward meeting this demand the Museum has just issued a new edition of the set entitled, "The Spread and Prevention of Communicable Disease," in sufficient number, the institution hopes, to supply all the schools of the city. On each is a large engraving delineating by scenes from life the mistakes of diet and bodily care which lead to human ills.

The charts are 22 x 28 inches each and each set consists of 15 charts on heavy paper, bound at top and bottom with tin, and suited in every way for hanging on the wall. Although each chart is clearly labeled the sets are accompanied by a booklet containing information which may be of service to teachers in talks on that important subject of physical well-being.

The delivery and collection of the charts is being attended to by the museum. As with the circulating collection of natural history specimens, the loan period is three weeks. Owing to the numerous requests from educational institutions outside of the city, arrangements have been made to offer a limited number of sets for a nominal price.

Educators both in New York, and in other parts of the country, who desire further information regarding the new edition may obtain it by addressing George H. Sherwood, curator of the department of public education, American Museum of Natural History, New York City.

A CITY GOVERNMENT EXPOSITION

A CITY government exposition was opened on October 24 in the City College and will remain there until a permanent home has been made for it in the old college building on E. 23d Street. At last New York will have what it has long needed—a municipal museum—which shall act as a sort of academic clearing house between the citizens of the city and those who govern it. This is the most ambitious exhibition ever given of municipal activities, and embraces every phase of those problems daily confronting the city officials.

The city government exposition is under joint auspices of The Public Welfare Committee, of which Stanley H. Howe is secretary, and the city government exhibit committee which is made up of Deputy Comptroller Fisher; secretary of board of water supply; George Featherstone; Dr. Frederick B. Robinson; director of the evening course and Sidney E. Mezes, president of the City College.

Francis J. Oppenheimer, director of the city government exposition, who managed the budget exhibits given by the city of New York, planned and executed the city government exposition, which, roughly speaking, falls into three organic divisions. First deals with the general "overhead" government of the city, including an assortment of medals and diplomas won by the city of New York at the Panama Pacific International Exposition. Second deals with the "Tells the Story" of what the various city departments are accomplishing with the problems daily confronting them. Third deals with the humanizing of the city's charities and shows by means of charts and models and statistics what the first city of the world is doing toward solving the world's most ancient problem—

poverty—in this exhibit are shown the following ten subjects:

1. Interior scene, recreation and sleeping room at Randalls Island at present, showing cleanliness, decoration and games, contrasting with
2. Room showing former conditions on Island.
3. Scene in Municipal Lodging House, contrasting with
4. Night scene in a park, showing men sleeping on benches.
5. A cross section of the new Children's Home Bureau, showing various clinics, etc., contrasting with
6. Scene in old-time privately conducted orphanage.
7. Care of the sick in a modern hospital ward, contrasting with
8. The hospital ward in the first almshouse.
9. Interior of the old morgue, showing bad conditions in strong contrast to the
10. Reception room of the new mortuary.

LIBRARIES AND NATIONAL SERVICE

DR. JOHN COTTON DANA, librarian of The Free Public Library of Newark, N. J., requested the clergy of Newark to read the following letter to their congregations on Educational Sunday, October 14:

Libraries throughout the United States have been engaged in collecting books and a million-dollar fund to equip and administer field libraries for our soldiers. This is perhaps the most direct means we can take to join with the many forces working all over the country.

Another expression of patriotism is the library's endeavor to bring to the attention of the people the literature of democracy.

The first patriotic thrills should foretell a more intelligent understanding. Realization of our aims must come not through a hate or fear propaganda but with an educational campaign to study problems brought out in this war.

Your library is equipped to supply current information regarding the European war and America's part in it, and the history of the development of democracy.

The library staff will recommend books for individual requests and prepare debate outlines and programs for club discussion on the rights of the state versus the individual, religion and international crises, the ethics of war and peace or any subject related to the war.

The public library has been called the people's university. It is one of the most democratic institutions which you help to support. It asks you on this Educational Sunday to consider the service it may render while our nation is at war.

THE UNIVERSITY OF MICHIGAN AND TEACHERS OF MANUAL TRAINING

BY the passing in Congress of the Smith-Hughes Bill the University of Michigan is practically assured of sufficient funds to provide a course of training for students desirous of teaching industrial subjects in secondary schools. Under the terms of this bill the government provides $15,000 to the states, provided the legislatures appropriate a similar sum, for the teaching of agriculture in the secondary schools. Similar sums, with like provisions, are given for teaching manual training and domestic science in the secondary schools and for training teachers to teach these subjects. These sums have been appropriated for the first year, with the expectation that they will be increased until the total will be doubled within four years.

The bill provides that this money shall be distributed by a state board which, for Michigan, consists of the president of the University of Michigan, the president of the Michigan Agricultural College, the superintendent of public instruction, and the president of the State Board of Education, under the final authority of the federal board. The university will in all probability receive between five and ten thousand dollars under the final clause providing for the training of teachers in these subjects. The board already has had several meetings since the passing of the bill, and the approval of the federal board is now all that is wanting before the final provision of the bill is put into force. The university's share in the work will be carried on under the charge of the department of education, and will consist in training students to teach industrial subjects. The selection of a man for this position who will also supervise the teachers in the state specializing in these subjects has already been made. His appointment to the professorship, however, has been made subject to the acceptance of the plan of the state board for the distribu-

tion of Michigan's share in the general appropriation.

EDUCATIONAL NOTES AND NEWS

Dr. Edward O. Sisson was formally inaugurated president of the Montana State University at Missoula on October 11. Greetings were made as follows: On behalf of the state board of education, Governor S. V. Stewart; the faculty, former Acting President F. C. Scheuch; the students, Stuart McHaffie, former president of Associated Students; the alumni, Dr. Charles Pixley, class of 1899; the State College of Agriculture and Mechanic Arts, President James M. Hamilton; the State Normal College, President Joseph E. Monroe; the State School of Mines, President Charles H. Bowman; the state superintendent of public instruction, Miss Adelaine Ayer, state rural school inspector. Chancellor Edward C. Elliott formally installed Dr. Sisson as president, after which President Sisson gave the inaugural address. In the address the new president outlined his ideas of university ideals and policy.

Two years ago, as was noted here, at the meeting held in memory of the late John Jasper, the chairman, Commissioner Churchill, appointed a committee to arrange for a permanent memorial to the former superintendent of schools of New York City. This committee consisted of Dr. George S. Davis, President of Hunter College, chairman; District Superintendent Joseph H. Wade, secretary; Miss Hester A. Roberts, principal, P. S. 10, Manhattan; Acting City Superintendent Gustave Straubenmüller; and District Superintendent Henry W. Jameson. The committee appealed to individuals and teachers' organizations for funds, and this appeal was responded to very liberally. We now learn from *School* that after considering several suggestions, the committee decided to have two large portraits in bronze, made by the Lamb Art Co. One of these bronze portraits will be placed in the rotunda of the board of education on October 27, 1917, at 1.30 P.M. The other will be placed in Public School 9, The John Jasper School, 82d Street and West End Avenue, on October 31, 1917, at 10 A.M. The tablets are 5 x 3 with a relief portrait of Mr. Jasper and the following inscription:

> In honor of John Jasper, city superintendent of schools 1879–1898, a pupil of the public schools, a graduate of the College of the City of New York, who gave forty-five years of service to the schools of the city as teacher, principal and superintendent.

The speakers at the unveiling of the tablet on October 27 were: President Davis, Hunter College; President Willcox, board of education; former President Churchill, board of education; and Acting City Superintendent Straubenmüller.

Jonathan Fairbanks, superintendent of schools in Springfield, Mo. for more than thirty-five years, died on September 29 at the age of eighty-eight years. The *Journal of Education* states that on the day of his funeral the schools were closed for the day, all flags in the city were at half-mast, and every store, factory and business place was closed for thirty minutes.

Marshall Wheelock Davis, for many years a teacher on the faculty of the Roxbury (Mass.) Latin School, died on October 23, aged sixty-three years.

William Addison Houghton, professor emeritus of Latin in Bowdoin College, died on October 23, aged sixty-four years.

Richard Halstead Ward, from 1869 to 1892 professor of botany at the Rensselaer Polytechnic Institute, died in Troy on October 28, aged ninety years.

T. R. Garth, Ph.D. (Columbia), has been elected head of the department of education in West Texas State Normal College.

Henry Lamar Crosby, Ph.D., of the Greek department of the University of Pennsylvania, has been appointed director of the summer school of 1918, the fourteenth session of the school. Professor Crosby is a graduate of the University of Texas and received the degree of doctor of philosophy from Harvard.

Arthur O. Smith, county superintendent of Hudson county, N. J., has been elected superintendent of schools of West Hoboken.

CHARLES PHILHOWER, county superintendent of Warren county, has been elected to the superintendency of schools as supervising principal, in Westfield, N. J.

IT is stated in the *History Teacher's Magazine* that Dr. Avery W. Skinner, specialist in history of the New York State Department of Education, will continue this winter the series of conferences upon the teaching of history which was inaugurated last year. The conferences are held usually in high-school buildings in different parts of the state, and cover the period from September, 1917, to April, 1918.

MR. HENRY H. HARRIS, of Lowell, has been elected president of the Massachusetts Teachers' Federation.

AT the sixty-fourth annual convention of the State School Teachers of New Hampshire, the following officers were elected: L. E. Ryder, of Manchester, president; Miss Faith Stalker, of Concord, vice-president; Stanley F. Freiz, of Manchester, secretary-treasurer; A. W. French, of Laconia, and Miss Josephine Emery, of Laconia, executive committee.

THE sixty-eighth annual convention of the Vermont Teachers' Association met at St. Albans, on October 27. The speakers included Principal A. S. Harriman, of Middlebury, president of the Teachers' Association; James Hartness, a member of the State Board of Education, and Professor George I. Burns, of the University of Vermont, who appeared as a representative of Mr. Hoover.

THE Association of Urban Universities, which meets in Pittsburgh from November 15 to 17, will hold the opening session on Thursday evening, November 15, in the Art Gallery of the Carnegie Institute. The president's address will be given by Chancellor Samuel Black McCormick, of the University of Pittsburgh. The general topic of the meeting is "Practical Aspects of Extension Work of Urban Universities and Colleges." The topic for the Friday morning meeting is "The Municipal Service of the University." Following a luncheon tendered by the chamber of commerce, Friday afternoon will be spent in visiting educational, industrial and historical points of interest in Pittsburgh. The program for Friday evening will be given by the department of dramatic art of the Carnegie Institute of Technology. The topic for Saturday morning is "Types of Extension Service." The meeting will close with a luncheon at the Hotel Schenley, tendered by the two local institutions entertaining the association. The address will be delivered by Dr. Jeremiah W. Jenks, of New York University.

PROFESSOR KARL F. GEISER is chairman of the section which will discuss the scope and function of political science in the college and university in relation to public thought and actual government, at the annual meeting of the American Political Science Association, Philadelphia, on December 29. Professor Geiser has arranged a program including Professors Charles A. Beard, of Columbia; Henry J. Ford, Princeton; W. F. Dodd, Chicago; B. F. Shambaugh, Iowa; McElroy, Princeton, director of the Speaker's Bureau of the National Security League; Mr. Walter Lippmann, of the War Department of Washington, and J. Q. Dealey, Brown University.

AT the annual convention of the Maine Teachers' Association, held at Bangor, Me., in October, Superintendent Bertram Packard, of Camden, was elected president. The other officers chosen were: *Vice-president*, Frank E. McGoulderick, Bar Harbor; *Secretary*, Glenn W. Starkey, Augusta; *Treasurer*, George R. Gardner, Brunswick; *Assistant Secretary*, Miss Marie Haseltine, Portland; *Auditor*, Harry E. Cobb, Augusta; *Member of Executive Committee for three years*, John F. Partridge, Fairfield. Dr. Augustus C. Thomas, who recently began his work as the Maine state superintendent of schools, delivered an address on "Our schools, the problems of to-day, the hope of to-morrow."

THE annual meeting of the Academy of Public Education was held on October 25 at the College of the City of New York. Professor I. L. Kandel of Columbia University spoke on "Education in England and Germany during the war."

Men subject to the second call to the National Army are to be given a chance to study for work in the army Signal Corps. The new Federal Board for Vocational Education has announced that, in cooperation with the War Department, it had planned to use every school in the country that can be equipped for this work, and volunteer select men would be assigned to schools in their towns or districts. Radio telegraphy will be taught in night courses. A call has been sent to all citizens properly qualified to serve as teachers. It is hoped to have the schools in operation in the near future. The first call is for the training of 150,000 operators.

Allotments totalling $423,532, the first federal grants of money to the states under the Smith-Hughes Vocational Education act, have been made by the Federal Board for Vocational Education to the seven states, of which the plans submitted for the promotion of vocational education have been approved. Texas has complied with the law as far as agricultural education is concerned, and an allotment has been made for salaries of instructors in agricultural schools. The total sum available for use during the current fiscal year is $1,800,000 and an equal amount must be raised by the states, thirty-five of which have so far submitted plans for approval which are being passed upon as rapidly as possible. New York's allotments are: Agriculture, $19,535; industrial, $84,950; training courses, $49,724.

On October 16, Rector Hall, the new dormitory for women at DePauw University, Indiana, was dedicated with appropriate ceremonies. The chief speaker was the Rev. Bishop Thomas Nicholson, of Chicago. The cost of building and equipment which was something over two hundred thousand dollars was met entirely by Edward Rector, Esq., of Chicago.

Actual operations are now being carried on in constructing the Vocational Education School by the students in that department of the Johnstown high school. More than one hundred boys are working on the project every day. This building, which is of frame construction, one story high, 111 feet long and 42 feet wide, will house, among others, a mechanical drawing room, print shop, metal work shop, electrical shop, brick, concrete and plastering shop, machine wood-working shop and a tin shop. Each class will spend two hours a day here and the teachers will cooperate with their instruction in the academic subjects.

Professor H. L. Latham, of Adrian College, Michigan, has been appointed editor-in-chief of the Library on Character Education. President Charles MacKenny, of Ypsilanti State Normal, has been elected a director of the National Institution for Moral Instruction, and will act as Professor Latham's special editorial adviser. Other directors of the institution will be associate editors to assist in the selection of extracts. It is desired that all who have done advanced work in character education will send in material for inclusion in this library, which is being got up at the expense of the donor of the $20,000 award for the best method of character education in public schools as an aid to the collaborators in the interstate character-education-methods research.

The new Federal Child Labor Law, which took effect on September 1, provides that hereafter no child under fourteen may be employed in any factory, mill, workshop or cannery in the United States whose products are to be shipped in interstate commerce, and no child under sixteen in any mine or quarry. The working day of children fourteen and fifteen years of age in factories may not be longer than eight hours and they may not be employed between 7 P.M. and 6 A.M. The enforcement of the law in the state of Montana has been delegated by the Secretary of Labor to the Children's Bureau of the Department of Labor, and the head of the new child-labor division of that bureau is Miss Grace Abbott, of Chicago. Miss Abbott has been at work for several weeks on the details of administration with a staff of temporary assistants in order that there might be no delay in enforcing the law. As an aid to the Children's Bureau in the enforcement of the child-labor law the Women's Committee of the Council of National Defense at Wash-

ington has issued an appeal to all women who wish to help American youth in war time, urging them to see that all children under fourteen are enrolled in school and asking them to forward to the women's committee information about their own community answering the three simple questions which the committee has prepared:

1. Are all children between six and fourteen in your town, county, or school district in school?
2. How do you know?
3. Are any children in need of scholarships in order to attend school?

THE National Society for the Promotion of Industrial Education reports the following new vocational courses for women: The University of Kentucky at Lexington enrolled about 75 women in two summer war emergency courses—one in automobile engineering designed to teach women to drive and take care of motor ambulances and one in wireless telegraphy. Dunwoody Institute, Minneapolis, reports that sixty per cent. of the 200 novices who are being trained for telegraphy in day and evening classes are girls and women. These classes are offered in response to a direct request from the neighboring railroads and telegraph companies. Hunter College, New York City, enrolled about 125 students in the Women's Wireless Classes (both day and evening). These intensive courses of six months are preceded by rigid entrance requirements. Goucher College, Baltimore, has enrolled over 600 women students in the "Specific Preparedness Courses," including such new subjects as agriculture, wireless telegraphy, mechanism of automobiles, and accounting. The Manhattan Trade School for Girls in New York City has embarked on a new experiment —The Manhattan Trade School Farm at Miller Place, Long Island. The forty or so girls are divided into two groups, field workers and household workers, and each girl has an opportunity to do both kinds of work. The purpose is to teach the girls in dull season the planting, growing and conservation of food and household occupations—providing a new form of secondary employment. Short food conservation courses, lectures and demonstrations for girls and women and practical assistance in canning, drying and conserving perishable food products have been generally established throughout the country through the many different educational, social and administrative agencies.

WE learn from the *School Board Journal* that Governor Burnquist, of Minnesota, has recently ordered a survey of state aid conditions with a view to reorganizing the system of appropriating funds so as to eliminate politics and favoritism. It is the purpose of the state to give preference to new communities where it is needed rather than to the older and wealthy communities. Professor L. D. Coffman, of the college of education, University of Minnesota, has been appointed head of the survey commission. The members are Dr. Frank A. Weld, president of Moorhead Normal School; Dr. S. F. Kerfoot, president of Hamline University; Mrs. Gertrude E. Skinner, of Austin; Mrs. H. H. Witherstine, of Rochester; J. F. Vaughn, of Chisholm; Superintendent George Franklin, Deer River; J. B. Arp, county superintendent of Jackson county; E. G. Hall, superintendent of the State Federation of Labor.

A BONUS of approximately 10 per cent. of their salaries has been granted all married members of the faculty of the University of Chicago who have been receiving $2,500 or less each year. Trevor Arnett, auditor of the university, is reported to have said: "The granting of the bonus is a war-time measure induced by the prevailing high prices. The board of trustees did not confine itself to a strict percentage, but made the proportionate bonuses fit the individual needs."

THE following resolution has been passed by the board of regents of the University of Michigan:

Resolved, That in cases of members of the university senate and instructors in the university going into government service during the present war the policy of the regents shall be: (1) To hold the positions of these men open until their return, regarding them as upon leave of absence; (2) In the cases of men leaving the university for such government service at a lower salary than the sal-

ary they were currently receiving from the university, to pay to the absentee the difference between the university salary and his salary from the government; (3) To select and supply at university expense substitutes in the places thus temporarily vacated.

THE Chicago Board of Education has approved a recommendation of the superintendent of schools to the effect that no new German classes be opened in the schools this fall; *i. e.*, that those now taking German be permitted to continue but that none others be permitted to begin the study; further, that no new text-books in German be purchased by pupils until the question of German in the elementary schools be finally settled. A resolution was introduced by school trustee Anton Czarnecki at a recent meeting of the board of education requesting the superintendent of schools to report upon the cost of German in the elementary schools, its educational, and economic value, and the loss to the schools, if any, of dropping the subject of German from the elementary-school curriculum.

THE University Court of the University of Edinburgh has issued an ordinance, published in the form of a White Paper, which states that the degree of bachelor of commerce (B.Com.) may be conferred by the university. For the purpose of advising the university authorities on matters connected with the degree, the court may from time to time appoint an advisory committee of persons experienced in commerce or industry, to be called the Advisory Committee in Commerce. If it be deemed expedient, it shall be in the power of the University Court, after consultation with the Senatus, to create a faculty of commerce, and to regulate the constitution thereof as regards composition and powers.

THE New York City Board of Education announces a series of lectures, through its public lecture system, explanatory of why the United States entered the war. Every lecture to be given this year in the hundred or more centers throughout the city will be preceded by a twenty-minute talk on the subject. The speakers for these addresses will be furnished by the National Security League and the Mayor's Committee on National Defense. Among the speakers will be Irvin S. Cobb and Martin W. Littleton. Dr. Henry M. Leipziger, supervisor of the Bureau of Public Lectures, who prepared this program has arranged for cooperation with the American Red Cross, which will provide speakers on war relief topics, and the New York City Food Aid Committee, which will help in the matter of lectures on home economics. Besides the twenty-minute patriotic talks, a number of courses dealing with the war and the problems arising out of the war have been provided for. Dr. Louis W. Wilkinson, of Cambridge University, will give eight lectures on "The War and the World's Future," including "Russia: the giant re-born"; England: the deliverance from stupid ease," and "France: the discovery of forgotten self." He will speak at the Harlem Y. M. C. A., the Morris High School, in The Bronx, and the Eastern District High School, in Brooklyn.

DISCUSSION AND CORRESPONDENCE

SOCIAL RELATIONSHIPS IN FRENCH AND AMERICAN ELEMENTARY SCHOOLS

DOROTHY CANFIELD FISHER in the September *Century* reports changing impressions on education that have come to her since she placed her little daughter in a Paris lycée. With her usual directness she states her experiences in very convincing form and in suggestion indicates in a single article more lines of progress than can be found in many works of pedagogy.

Her presentation of the case of the French married woman teacher is valuable not only for our schools but for the entire field of occupational readjustment which is one of the credits the Great War will have to its account.

The division of labor between the teacher and the répétitrice is a great need in American schools. It is not unlike the plan found in certain Italian schools in which one finds assistants who are trained to certain lines of detail work not as a temporary stage of occupation but as a life work. Their relations

to professors and students in shop, laboratory, studio and class room make possible a certain flexibility of program far in advance of the mechanical adjustment of lecture, recitation, study and work periods which limit our own secondary-school schedules. Some American universities and private schools have moved farther in this direction than is commonly realized.

It is when the writer endeavors apparently against her own better judgment to commend the exclusion of parents from French schools that one finds himself hoping that the influence may not spread. Some New York City public schools have been in years not far gone as exclusive as are any educational institutions across the water. It is an easy matter to make out a strong case against the presence of parents in the school room. Any ordinary experience can recall many pathological instances from which to form an indictment. The thoughtful teacher or principal can show, however, that parents, teachers and pupils have grown by mutual contact into community relationships and responsibilities which may be one of the best educational outcomes which the school has produced. There are trials and difficulties in our American "open" school room system, but, as Mrs. Fisher shows in the case of the married teacher, there are large credit items to be taken into consideration. One limitation upon any attempt to strike a balance between the debits and credits in this account arises from the very fact that the foreign school room is usually closed to visitors and thus prevents any fair statement of what is going on within it.

It has not been my experience that it is as difficult to secure access to class rooms in France, Germany and even Italy as is commonly reported. Girls' schools, strange to say, are often less difficult of access than are those for boys. In fact the only school I ever failed to get into when I wished to visit it is located in an American city! I have, however, found in these closed school rooms conditions which seem to me to overbalance the supposed advantages Mrs. Fisher thinks may be discovered upon further reflection.

The undue prominence of brighter pupils which the author deplores I have found well developed in schools which seldom received—I do not say welcomed—an outsider. I have never found in them that very high-grade achievement by no means uncommon in our schools—the class which courteously receives a visitor and then goes on with its work either in frank disregard of the stranger's presence or in some mysterious way including him within its absorbing activities.

In foreign schools the self-consciousness of master and pupils is often so great that work can not go on while the visitor is present. I have found that my only means of securing a return to normal conditions was to gain permission to examine records, text-books, written work or anything else that I could think of. When I was safely placed in a corner at the back of the room, with my eyes upon material on a table, I could be forgotten and the current of usual activity would be resumed.

Mrs. Fisher states with reference to grammar, arithmetic and other common school subjects that there is practically "not a pin's difference between their way of treating those subjects and ours." I wish that I could commonly find the mother tongue as well taught in America or England as it was in many schools I have visited in France. On the other hand the other common branches were usually handled by methods which were more mechanical even than those we suffer under.

The difference between America and other countries in relationship existing between adult and child no doubt accounts for much of the harshness I have seen in closed school rooms, yet the changes for the better with increased connection between home and school in our own cities leads me think that the seclusion and limited association often encourages petty tyranny on the part of the teacher.

Methods of recitation also show the effect of the closed door. The greater possibilities of individual work I have seen in many cases

go so far that regularly each pupil in turn came to the teacher's desk and recited verbatim what he had learned, speaking so low that no other pupil could hear what he said. Sometimes the teacher's lips moved as he said over the words and when the pupil faltered, unconsciously the older parrot went on to the end of the section and commended the unusual success of the repetition before he realized to whom the credit was due.

The social aspects of this home and school problem are not remote from those arising in connection with that most tragic of relationships in American schools—"supervision." Our conditions are deplorable at times. One comes to understand the primary teacher in a western city who told me that after many trials the teachers in her school had an ideal principal. "He has not come into my room in two years. He knows his own business and keeps to his office." It is not strange perhaps that in her school one found some of the difficulties that have not been uncommon in what experience I have had in my visits to insulated school rooms abroad. Among these are little tricks of method, speech, and manner which in more social situations would stand much better chance of removal by attrition. In actual teaching too in foreign schools I have seen children perpetuating conditions in singing for instance which a very ordinary music supervisor would have removed in a short time.

French schools are highly centralized. There seems to the observer to be little room for individual initiative. Yet I have seen a boys' school in Paris in which the director had studied his situation intelligently and by using what initiative he found possible had given to himself and his school a larger measure of freedom than is ordinarily exhibited in our most independent organizations.

We need some term which is free from the unfortunate repressive associations connected with supervision and yet retains the social cooperative function which is needed to counteract our natural human tendency to isolated possession and domination over whatever we can control. The debits on our American school account are serious and deserve searching consideration, but on the credit side we do have an advantage in social relationships within the school and the part the parent and other visitor plays in this achievement is far from unimportant.

Frank A. Manny

QUOTATIONS

SCIENCE TEACHING IN ENGLISH SECONDARY SCHOOLS

The British Association, in appointing a committee "consisting almost entirely of teachers" in secondary schools to report on science teaching in such schools, seems to have overlooked the fact that the interrelations of elementary and secondary schools are even now of so close a character that the teaching in the two grades can not be dissociated. The number of children passing from the elementary to secondary schools is now very large, and it is destined greatly to increase. We are, therefore, disappointed to find nothing in the report indicating the preparation necessary in the elementary schools for the children who are to pass on. The elementary school will more and more, we trust, tend to become a preparatory school; and therefore in the matter of science teaching it requires, from the point of view of science teaching in secondary schools, special guidance. The report, however, as it stands is well worth reading, though we are bound to say that by far the most valuable parts of it are the "typical science courses" supplied at the end, in which the following eminent expert science teachers, Mr. Archer Vassall, of Harrow; Mr. F. W. Sanderson, of Oundle; Miss Lilian Clark, of Dulwich; Miss J. M. Drummond, and Miss R. Stern, notable workers at the North London Collegiate School; Professor Nunn, and Professor Armstrong, set out schemes of work that will be eagerly studied and adapted by teachers in many grades of schools. Elementary teachers will do well to consider these courses and weigh the possibility of adapting them to the work of their higher standards.

The report itself is very interesting, but it is full of disputable propositions asserted with

rather unnecessary dogmatism. That very vexed question as to the effects of special studies on general capacity is treated as, in at any rate most fields, closed. We are told, for instance, that:

> Dr. W. G. Sleight has shown conclusively that practise in one form of memorizing (*e. g.*, the reproduction of the substance of a passage of prose) produces no general improvement of the memory, but may even cause deterioration in the power to memorize material of a different kind. Ability acquired in memory exercises of one type is, in fact, transferable to exercises of another type only if the second contains special elements that are also characteristic of the former, and then only if the learner perceives and deliberately takes advantage of the partial identity. Thus, a boy trained in memorizing series of numbers shows an improved power to memorize "nonsense-syllables" if, and only if, he has recognized that the use of rhythm is an aid to the mastery of the material in both cases. It appears, then, that the training received in a specific course of study is an ability acquired in dealing with situations of a certain kind, and is of service without the boundaries of the study only in situations that can be regarded as substantially identical with those within it.

We may express surprise that the British Association, with its tradition of strict scientific thought, should be used as a shelter for dogmatism such as this. Conclusions of this type are based on a certain number of experiments which have convinced Dr. Sleight and others. American experiments have been directed to the same conclusions. But these subtle psychological conclusions are in no scientific sense ascertained and are in fact directly opposed to the conclusions arrived at from experiments during hundreds of generations of school children. Until the past few years the experience of teachers has always asserted that any course of study reacts on the whole intellectual outlook. Dr. Sleight and others from experiments in one generation have elaborated a doctrine of "water-tight" abilities arising from special studies and only "useful" in certain situations. We do not complain that experimenters should assert this view, startling though it is. We do complain that a committee of the British Association should assert that it has been "shown conclusively" and should build on it a theory of science teaching. In fact we should have thought that the inseparable character of scientific knowledge and scientific method was a function of the essential unity of the brain and personality and not a function of disunity and discontinuity. The committee, however, based this inseparable character on Dr. Sleight's experiments. We do not pretend to know which theory is true; but we are certain that dogmatism on the subject is quite capable of rending the whole teaching profession asunder.

There is a great deal more in this matter than a mere question of theory. It lies behind the whole question of the academic qualifications of headmasters. The committee view very seriously the fact that the public schools "are to a very large extent in the charge of classical specialists." They say "it is difficult not to recognize that many of the defects and deficiencies in the organization of the schools (from the science point of view) are related to the apathy and antipathy of their headmasters towards science." Now if the theory is adopted that all intellectual training is a unity, then there can be no such thing as "the science point of view." But, of course, if a classical training only enables a man to deal educationally with children from a particular point of view acquired in a classical training, then the educational world is in a parlous state. The same criticism would apply to all classes of training, and headmasters who have had any special training at all must be done away with. That way madness lies. We hold that a strict classical training produces a very high type of administrator, teacher and thinker; and though we are in no way pledged to compulsory Greek (or even Latin) as the basis of a university course and are certain that science and modern studies if adequately taught are equally capable of producing "humane" headmasters and headmistresses, yet we entirely decline to believe that a classical training unfits a man for a just outlook on education as a whole. Education is a unity, and there should be no such thing as "the science point of view."

We lay great stress on these difficulties, but we are also anxious to pay tribute to the value of the practical side of this report. The section on "experimental and descriptive teaching" is very useful, though we are rather inclined to question the distinction drawn between "manual training" and "experiment." In the best manual training it is not merely a question of dexterity and skill. The attention should be "fastened on the answer given by nature to the question put to it." That is the reason why elementary and secondary science teaching should be treated, as we said in the early part of this notice, as a unity. We are glad that the committee are pressing for better salaries for science teachers, and should like to emphasize their demand that "a science teacher should be afforded opportunities for study and research in order that his instruction may represent increasing scientific knowledge." —*London Times* Educational Supplement.

BOOKS AND LITERATURE

Public Secondary Education. By Calvin Olin Davis. Rand McNally & Co. 1917. 270 pp.

There is great need at the present time of some comprehensive survey of the history of American education that will bring out some of the principles that have been fundamental in its development. With the materials at hand, however, it is beyond the scope of one man to make such a study. The different conditions that have attended the development of education in each state render essential the assembling and interpretation of local documents and sources before a synoptic view can be presented. The present volume is an important contribution in this direction, and the future historian of American education will probably not find it necessary to have recourse to the original sources when he comes to consider the development of secondary education in Michigan. The first three chapters of the book present a well-written and concise review of the existing accounts of the history of secondary education in this country; the remaining six chapters deal entirely with its history in Michigan.

It is perhaps due to Professor Davis's concentration on the secondary branch of education that he fails in the introductory survey to give due weight to the vocational motive in establishing schools in the Colonial period. His statement, therefore, that the religious motive "determined largely the aim, scope, and administration of all educational undertakings" (page 13) needs some qualification, as well as the statement on the following page that it was hoped that every boy "would become past-master of Latin, and perchance have a good command of Greek and Hebrew." In his discussion of the decline of the colonial grammar school Professor Davis allows an obviously anti-classical bias to obscure an accurate interpretation of the causes of this decline. The emphasis on Latin was certainly not one of the causes, as the author indignantly maintains. If that had been the case, how can one account for the fact mentioned on page 96 that "magazine writers and statesmen were wont to fill their articles with allusions to Rome and to ancient heroes, etc.," nearly a century later, or for the fact that Latin and Greek continued to be the most important parts of the requirements for entrance and graduation at the University of Michigan still later (pages 131, 135, 143 f.)? It is just as dangerous to apply the modern canons of a liberal education to the past as to insist on the priority of the classics in the curriculum of to-day. The reasons that Professor Davis adduces for the decline of schooling in the Northwest (page 77), combined with the religious decline at the beginning of the seventeenth century, would have been equally applicable in accounting for the stagnation of the colonial schools. The special privileges and exemptions that the author claims to have been offered to tempt men to teach in the grammar schools were not newly discovered bait, but were the heritage of the teaching profession for about two thousand years.

The main part of the volume presents a scholarly and painstaking study of the developments that led up to the establishment of the

modern high school in Michigan, the relationship of the state university with that movement, and the history of the secondary curriculum in that period. The student will find here a good descriptive account of the institutional life of the high school based on contemporary records; the facts are well assembled and the picture stands out clearly. One misses, however, a careful analysis of the relation of the secondary school to public life and needs. Thus, while the changes in the curriculum are carefully traced, the determining causes of these changes are not discussed. The movements may have been merely imitative, or they may have been due to profounder social changes with which the local historian should be acquainted. Indeed, it is at least an open question whether the student of secondary education in the present difficult period of transition would not profit more from a study of the principles that have determined the history of the high school than from a chronological survey. Professor Davis recognizes this point of view in his introduction; he has not, however, preserved a proper balance between the institutional history and the account of the political, social and economic factors which he admits "have borne with more or less direct weight upon every phase of the special subject" (page viii). It may be hoped that on some future occasion, perhaps in the supplementary work that Professor Davis promises, this additional and illuminating material will be added to complete what is otherwise a useful contribution towards the ultimate history of American secondary education.

I. L. KANDEL

PROFESSORS' SALARIES

A CONCISE BIBLIOGRAPHY

THE following comprises a select bibliography, chronologically arranged, of the important literature relating to salaries in colleges and universities of the United States. A few references to other countries are included, as are also a few which relate to the general subject of teachers' pay.

Insofar as is known to the writer, this is the first bibliography dealing with the specific subject of professorial salaries.

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THE VALIDITY OF THE AYRES SPELLING SCALE

FROM time to time the question is raised as to whether in the standardization of a measure a sufficient number of cases has been used to warrant its validity. Certainly it would seem that a larger number of responses from varied reagents are needed for some subjects, such as spelling, than for others, such as the four fundamental operations with integers, for the corpus of material from which selection is made for teaching is in the one case much larger than in the other. In deriving his scale of 1,000 words for measuring ability in spelling, Ayres secured on the average 1,400 spellings of each word, using 74,000 pupils in 84 cities. It would seem that his reagents were sufficiently varied, though he does not give data concerning the distribution of his responses for the individual words; but this study shows that to justify his claim of equal difficulty for the words of each group he should have secured a considerably larger number of spellings for each word. Ayres says in his monograph[1] that "all the words in each column of the scale are of approximately equal difficulty" and that "if as many as 10 words in one column were considered as a group, the agreement was nearly exact."

In January, 1916, for the purpose of a

[1] "The Measurement of Ability in Spelling," pp. 36 and 34.

different experiment, fifty words from the Q list were given to 743 boys who were just completing the high sixth grade in five public schools of New York City. The teacher of each group in the presence of an observer announced the words, following each one with a sentence so constructed as to make the meaning of the word unmistakably clear. The papers were all graded by one trained reader and later checked by a graduate student experienced as a grade teacher. The results showed that for these 743 boys the fifty

TABLE I

	7,686 Pupils			1,000 Pupils in New York City		1,736 Pupils in Baltimore Co.		4,950 Pupils in Baltimore City	
	Mistakes	Per Cent. of Pupils Missing Each Word	Rank	Mistakes	Rank	Mistakes	Rank	Mistakes	Rank
1. sometimes	230	3.0	1	48	4	30	1	152	1
2. measure	334	4.4	2	33	2	68	9.5	233	5
3. estate	336	4.4	3	52	12.5	60	4	224	4
4. factory	347	4.5	4	50	9.5	55	2	242	6
5. section	351	4.6	5	76	21	65	8	210	3
6. result	360	4.7	6	26	1	63	5.5	271	9
7. appoint	365	4.8	7	44	5	68	9.5	253	8
8. entire	384	5.0	8	38	3	63	5.5	283	11
9. whom	404	5.1	9	74	19	82	11	248	7
10. due	423	5.4	10	85	26	138	21	200	2
11. command	470	6.1	11	49	7.5	118	17	303	13
12. field	504	6.6	12	146	43	64	7	294	12
13. famous	518	6.7	13	70	18	174	31	274	10
14. engage	535	7.0	14	49	7.5	95	13	391	18
15. important	537	7.0	15	50	9.5	99	14	388	17
16. running	543	7.1	16	52	12.5	58	3	433	21
17. declare	549	7.1	17	69	17	108	15	372	16
18. connection	595	7.8	18	51	11	212	45	332	14
19. debate	606	7.9	19	85	26	158	24	363	15
20. addition	649	8.4	20	102	33.5	93	12	454	22
21. serve	653	8.5	21	78	22	175	32	400	20
22. publish	703	9.1	22	47	6	113	16	543	31
23. position	722	9.4	23	85	26	129	18	508	25.5
24. convict	726	9.4	24	84	23.5	168	28	474	24
25. include	764	10.0	25	201	49	164	26.5	399	19
26. progress	768	10.0	26	88	29	129	13	551	33
27. president	776	10.1	27	64	16	184	35	528	29
28. either	788	10.3	28	90	31	190	38	508	25.5
29. property	801	10.4	29	63	15	183	34	555	34
30. terrible	817	10.6	30	89	30	264	49	464	23
31. select	821	10.7	31	104	35.5	170	29	547	32
32. Saturday	835	10.9	32	106	37	206	44	523	28
33. private	844	11.0	33	147	44	155	23	542	30
34. region	848	11.0	34	174	46	153	22	521	27
35. relative	864	11.2	35	108	38	189	37	567	36
36. firm	874	11.4	36	129	41.5	185	36	560	35
37. claim	884	11.5	37	117	40	132	20	635	40
38. ledge	890	11.6	38	129	41.5	180	33	581	37
39. term	894	11.6	39	62	14	162	25	670	43
40. effort	906	11.8	40	75	20	194	39	637	41
41. remember	924	12.0	41	99	32	198	41	627	38
42. employ	980	12.8	42	84	23.5	262	48	634	39
43. surprise	987	12.9	43	112	39	164	26.5	711	44
44. represent	1,066	13.9	44	102	33.5	173	30	791	48
45. allow	1,071	13.9	45	200	48	214	46	657	42
46. period	1,139	14.8	46	148	45	205	43	786	47
47. crowd	1,168	15.0	47	236	50	201	42	731	45
48. final	1,169	15.0	48	86	28	304	50	779	46
49. primary	1,176	15.2	49	183	47	195	40	798	49
50. information	1,563	20.4	50	104	35.5	233	49	1,226	50

words chosen were not of equal difficulty: the word *result* was misspelled 24 times, while the word *crowd* was misspelled 345 times. On the easiest ten words these boys averaged 95.4 per cent., while on the hardest ten words they averaged only 82.7 per cent. The standard for the grade is 88 per cent.

These results cast such suspicion on the difficulty assigned in the scale to the particular fifty words used that for the purpose of ascertaining more accurately their relative difficulty they were given in March, 1916, to 257 girls of the high sixth grade in New York City schools, in October, 1916, to 994 sixth-grade pupils and to 742 seventh-grade pupils in Baltimore county, Maryland, and a little later to 4,950 high sixth-grade pupils in the city of Baltimore. These pupils do not represent as great a variety as is desirable, but 7,686 spellings of each word give weight to the conclusions reached in this study.

In Table I. are given the fifty words arranged in the order of difficulty for the 7,686 pupils and the number of times each was misspelled by each group. One column of the table shows for the convenience the per cent. of pupils missing each word; three other columns show the rank in difficulty of the words for each group. The coefficients of coordination between the ranks of the groups are shown in Table II.

TABLE II

	Whole Group, 7,686	New York, 1,000	Baltimore Co., 1,736	Baltimore, 4,950
Whole group, 7,686.....		73	82	97
New York, 1,000.....	73		57	63
Baltimore Co., 1,736....	82	57		72
Baltimore, 4,950.....	97	63	72	

From Table I. it may be seen that *sometimes* is missed only 230 times by these 7,686 pupils, or by only 3 per cent. of them, while *information* is missed by 1,563, or by more than 20 per cent. of them. On the first ten words in the list these pupils average 95.4 per cent., while on the last ten they average only 85.4 per cent. It should be added that the Q list is too easy adequately to test sixth-grade pupils, as among the papers there are many that are perfect, thus giving a large undistributed group at the upper end of the range.

On the basis of responses from 20,000 pupils in Boston, Ballou has shown[2] that beyond 1,000 cases there are insignificant changes in the norms for the Courtis tests in arithmetic, and he concludes that 1,000 responses would likewise be sufficient for "spelling and other subjects." This conclusion is manifestly not warranted; for if it were, the coefficients of coordination in Table II. would all be approximately 100. On the contrary, the coefficient between the ranks of the words by the 1,000 responses from New York City and those by 1,736 from Baltimore county is only +.57. As the number of pupils becomes larger naturally the coefficient increases; but that between the 4,950 responses from Baltimore and the 2,736 from New York City and Baltimore county combined is only +.88. Perhaps if the pupils of both groups had been more varied the agreement between the total responses would have been closer.

The conclusions are obvious: first, that the fifty words used from the Ayres Q list are not "of approximately equal difficulty" and consequently from it ten words may be chosen on which pupils will make a much better score than on ten other words; and, second, neither 1,000 nor even 2,736 responses, such as were secured, are sufficient to give a nearly perfect standardization. The result of the study suggests the wisdom of testing all of the remaining words similarly. Ayres has presented an excellent selection of 1,000 words, and his pioneer work in standardization has been of incalculable help in supervision; it would be well for the numerous schools using the list to supply sufficient data more closely to establish the relative difficulty of the words.

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[2] "Educational Administration and Supervision," 1: 469–472.